Claims

I. A method for the mechanical working of metals and alloys, characterised in that the method is performed in the presence of an aqueous cooling lubricant having a pH of 6-10 and containing a phosphate ester of the formula

 $R_1(\text{oxyalkylene})_n OP(O)(X)(OH)$  (I), or

 $(HO)_2(O)P-(oxyalkylene)_m-OP(O)(OH)_2$  (II),

where R<sub>1</sub> is an alkyl group with 1-12 carbon atoms, oxyalkylene is a group containing 2-4 carbon atoms, n is a number from 1-20, X is hydroxyl, R<sub>1</sub>O or R<sub>1</sub>(oxyalkylene)<sub>n</sub>O, where R<sub>1</sub>, oxyalkylene and n have the meanings mentioned above, and m is a number from 4-40, or a salt thereof, and a carboxylic acid of the formula

HOOCH(R<sub>2</sub>)CH<sub>2</sub>COOH (III),

where  $R_2$  is an aliphatic group with 4-10 carbon atoms, or a salt thereof, or a mixture of any of the compounds I, II and III.

- 2. Method according to claim 2, characterised in that R<sub>1</sub> contains 2-8 carbon atoms and the group (oxyalkylene)<sub>n</sub> contains at least partially oxypropylene units and n is a number from 4-15.
- 3. Method according to claim 2, characterised in that the phosphate ester of formula I is n-butyl-(C<sub>3</sub>H<sub>6</sub>O)<sub>10</sub>OPO<sub>3</sub>H<sub>2</sub>.
- 4. Method according to any of the claims 1-3, characterised in that the phosphate ester of formula II is (HO)<sub>2</sub>(O)P-(oxypropylene)<sub>8-15</sub>OP(O)(OH)<sub>2</sub>.
- 5 Method according to any one of claims 1-4, characterised in that R<sub>2</sub> in formula III is octenyl, decenyl, diisobutenyl or tripropenyl.
- 6. Method according to any one of claims 1-5, characterised in that the total amount of compounds I and II is from 0,2 to 5% by weight and the amount of compound III is from 0,2 to 5% by weight.
- 7. Method according to claim 6, characterised in that the total amount of compounds I and II is from 9,4 to 3% by weight and the amount of compound III is from 0,4 to 3 % by weight.
- 8. A concentrate, characterised in that it contains anionic compounds I, II and III according to claims 1-5 20-95% by weight additional corrosion inhibitors 0-30% by weight

additional lubricants

water

other ingredients

0-30% by weight

5**,**80% by weight

0-30% by weight,

the weight ratio between the compounds I and/or II and compound III being from 1:15 to 15:1

9. Concentrate according to claim 8, characterised in that it contains

the anionic compounds I, II and III

50-90% b

the additional corrosion inhibitors

the additional lubricants

-15% by weight

water

the other ingredients

0-15% by weight,

the weight ratio between the compounds I and/or II and compound III being from 1:5 to 5:1.

10. Concentrate according to claim 8 or claim 9, characterised in that the total amount of the additional corrosion inhibitors, the additional lubricants and the other ingredients is from 5 to 40% by weight.